

February 18, 2004

Mr. Joel Hebdon, Director  
Regulatory Compliance and Analysis Division  
Department of Energy  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

Dear Mr. Hebdon:

The State of Washington Department of Ecology (Ecology) and Department of Health (Health) received your review comments (Reference 1) on the draft Significant Modification (Reference 2) to the Hanford Site Air Operating Permit issued last November for public review. Our responses to your comments are attached.

Resulted changes based on the public review process will be incorporated into the proposed AOP modification for another 45-day EPA review starting next month. If any parts contained in the response are unacceptable to you, you have the right to discuss your objections with Ms. Roylene Cunningham or Mr. Douglas Hardesty of EPA-10 during the 45-day EPA review period and within the 60-day interval after the EPA review (40 CFR 70.8).

Should you have any questions concerning this matter, please contact Oliver Wang of Ecology.

Sincerely,

Oliver Wang, Professional Engineer  
Nuclear Waste Program  
Washington State Department of Ecology

Attachment

Reference 1: Comments on the Hanford Air Operating Permit Significant Modification, Dated 12/22/2003, from Joel Hebdon of DOE-RL to Oliver Wang of Ecology and Al Conklin of Health

Reference 2: Draft AOP Significant Modification submittal for EPA review, United States Environmental Protection Agency and Affected State Notification and Review of Draft Significant Modification to the Hanford Site Title V Air Operating Permit, Dated

11/17/2003, from Mike Wilson and Oliver Wang of Ecology to Laurie Kral of EPA-10, Andy Ginsburg of ODEQ, Jim Russell of YIN and Gary Burke of CTUIR.

cc:

Mike Wilson  
Ron Skinnarland  
Steve Lijek  
Jerry Hensley  
Mary Anne Wuennecke  
Tim Hill  
Tom Todd, Ecology Air Quality Program  
Al Conklin, WDOH  
S. L. Clark, WDOH  
J. J. Martell, WDOH  
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Central File: Hanford AOP  
Reader File

**Ecology/Health Responses to DOE Review Comments (04-RCA-0045, dated 12/22/2003):**

**General:** The header date should be updated to reflect the date Ecology issues this revision.

**Response:** The cut-off date for this general revision is October 2003. The header date reflects the cut-off date, and the actual issue date will be determined at the time of issuance. All the revised modifications before the cut-off date are updated.

**Ecology Statement of Basis**

1. Page 24, completed conditions table: Add the original WTP NOC approval DE02NWP-002 dated 7/8/2002. This approval was replaced by DE02NWP-002, Rev. 1 dated 11/24/2003.

**Response:** The cut-off date for this revision was October 2003. Any approved modifications after the cut-off date will be revised in the next revision. Ecology/Health revises Hanford AOP several times a year. In fact, DE02NWP-002, Rev1, is being processed as a minor AOP modification at this time, and is expected to be issued later as a new revision.

**AOP Standard Terms and Conditions**

1. Page 7 Section 1.0 Acronyms: Delete "DOP - dioctyl phthalate". It is no longer used in testing.

**Response:** "DOP - dioctyl phthalate or equivalent" is still required by the ANSI 510 standard used to test HEPA filters. This is a minor issue, Ecology/Health decide to keep the term "DOP" on the acronyms list at this time.

2. Page 11, bullet for 600 Area: The 600 Area is not one of the 4 major operational areas. The bullet for the 600 Area should be deleted and the sentence edit to read:  
"Land between the operational areas is designated as the 600 Area."

**Response:** Comment accepted.

3. Page 14, AOP Standard Terms and Conditions, Section 3.6 Permit Fees, 2<sup>nd</sup> paragraph "Per WAC 246-247-065...provisions of WAC 246-254-170.":  
To provide for public involvement for all sections of the permit, and to more accurately consider the Ecology/Health MOU, replace AOP Standard Terms and Conditions, Section 3.6 "Permit Fees", second paragraph "Per WAC 246-247-065 [Fees]... provisions of WAC 246-254-170." with the following:  
"Determination of fees for all portions of this permit shall follow the regulatory requirements contained in Part X of WAC 173-401, final rule."

**Discussion:** The Memorandum of Understanding (MOU) between Washington State Department of Ecology (Ecology) and Washington State Department of Health (WDOH), signed by both agencies in 1993, contains the following text regarding billing the Department of Energy (Energy):

"To avoid billing Energy for overlapping costs regarding the Hanford facility, both agencies shall follow Ecology's cost accounting and tracking requirements as set out in proposed 173-401 WAC, Part IX. There will be separate costs for separate duties under separate authorities."

Note: Part IX of the proposed rule appears, with slight differences, as Part X (WAC 173-401-900 through 930) of the final rule.

However, according to AOP Standard Terms and Conditions, Section 3.6 Permit Fees, costs incurred by the permittee for administration and enforcement of AOP Attachment 2 use WDOH rules WAC 246-247-065, WAC 246-254-120 (1)(e), WAC 246-254-160, and WAC 246-254-170.

In addition to not following language in the MOU, the cited WAC 246 chapters (WDOH rules) do not provide for any public involvement, nor do they provide for tracking, auditing, or a dispute resolution process for disputes pertaining to fees as required by WAC 173-401-900 through 930.

Specifically, the cited WDOH rules do not provide for preparation and public review of draft workload analyses [as required by WAC 173-900-(3)], public review of its draft budget [as required by WAC 173-900-(4)], or public involvement during the fee determination process [as required by WAC 173-920]. Also there is no requirement to published the fee schedule and no right to petition and review [as required by WAC 173-900(6)]. In addition, the cited WDOH rules do not contain a revenue tracking requirement consistent with WAC 173-401-920(2), or an audit requirement as provided by WAC 173-401-920(3) that are open to the public. They also do not contain a dispute resolution process for disputes pertaining to fees as required in WAC 173-401-925(4).

The Washington State Operating Permit program requires public involvement in the fee determination process [WAC 173-401-900(1), 70.94.162 RCW]. Neither Ecology or WDOH can eliminate the public involvement through the imposition of a permit condition. Nor should it be allowable to eliminate public involvement by way of a MOU.

**Response:** The language cited in the 1993 MOU between Ecology and the Department of Health was specifically and simply to avoid "overlapping costs regarding the Hanford facility." In order to accomplish that, Ecology and Health agreed to follow "cost accounting and tracking requirements" in an early draft of WAC 173-401 in order to avoid duplication, and without specific reference to specific sections of the then proposed WAC. The agreement was limited and only intended to accomplish that avoidance. It is not and was never intended to be a commitment for Health to follow all of Ecology's fee regulations in lieu of the department's own regulations, which take precedence. The accounting and tracking done by the department accomplishes the intent of that MOU.

4. Page 11 Section 2.0 General Process Information: "Siemens Power Corporation, Nuclear Division" is now Framatome-ANP

**Response:** Comment accepted.

5. Page 19, Section 4.3, certifications regarding regulated asbestos activities: Edit the clause to read "~~and the EPA at the address shown previously~~ or other address as directed by the BCAA ~~or EPA~~." BCAA now has delegated authority from EPA for asbestos.

**Response:** Comment accepted.

6. Page 20, Section 4.3.2, last sentence: The last sentence is unclear. Is reporting only required for emission points that have an approval condition that requires it? Editing the last sentence as follows would provide clarification:
- " The annual air emissions inventory report will minimally contain information on nonradioactive air emissions:
- for emission points contained in AOP Attachment 1, *Tables 1.3, 1.4, 1.5 and 1.6*,
  - for emission points where there is a specific approval condition that requires tracking in the report, and
  - for other emission points as directed by Ecology."

**Response:** Comment accepted.

7. Page 30, Table 5.1, Inapplicable Requirements: Add 40 CFR 63, Subpart GGGGG - National Emission Standards for Hazardous Air Pollutants: Site Remediation, to the Table 5-1. Basis: Hanford does not meet the following: "(2) Your site remediation is co-located at your facility with one or more other stationary sources that emit HAP and meet an affected source definition specified for a source category that is regulated by another subpart under 40 CFR part 63. This condition applies regardless whether or not the affected stationary source(s) at your facility is subject to the standards under the applicable subpart(s)." Hanford is not subject to another 40 CFR part 63 MACT standard.

**Response:** Comment not accepted for now. Hanford site is operated by many contractors, and indeed has co-located stationary sources that emit HAP and meet affected source definitions specified for source categories that are regulated by other subparts under 10 CFR part 63. For instance, one of the new facilities, the Waste Treatment Plant (WTP), is a co-located stationary source that is regulated by another subpart (EEE) under 10 CFR part 63. Ecology and DOE agreed to engage in a NESHAP applicability review for the entire site. More applicability information will result from the review shortly.

### **AOP Attachment 1**

1. Pages 1-11, 1-12, 1-13, 1-21, 1-22, 1-23: The header date inappropriately reads "September 2003".

**Response:** The cut-off date of October 2004 will be used in the final revision.

2. Pages Att 1-7 and 1-8, Table 1.1 (see 02-RCA-0327):
  - a. page Att 1-7: Emission unit "Cold Vacuum Drying" should be P-296K142 001.
  - b. page Att 1-8: Emission unit "P-WRAP1 001" should be P-296W004. Also the parenthetical "(WRAP1)" should be deleted from the description column.

**Response:** Comment accepted.

3. Table 1.6: Replace the original WTP NOC approval DE02NWP-002 dated 7/8/2002 with DE02NWP-002, Rev. 1 dated 11/24/2003.

**Response:** The cut-off date for this revision was October 2003. Any approved modifications after the cut-off date will be revised in the next revision. Ecology/Health revises Hanford AOP several times a year. This particular NOC is being processed by Ecology as another AOP modification to be issued at a later date.

4. Page 1-10: Change the regulatory citation WAC 173-401-200(11) to WAC 173-401-200(12). The term "emissions unit" is defined in WAC 173-401-200(12).

**Response:** Comment accepted.

5. Page 1-31, first condition "Engine E shall operate no more than 350 hours per year.": Edit the "Required Records" to read "Maintain records ~~operations log~~ showing all hours of operation."

**Response:** Comment accepted.

6. Page 1-31, second condition " NOx 75.5 pounds per hour NOx.":
  - a. Edit "Periodic Monitoring" to read "Certification stating the generators have not been modified to increase fuel input rate or Recordkeeping & average fuel consumption rate determination shall be performed at least once per 12 months."
  - b. Edit "Required Records" condition number 1 to read "If applicable, Monthly fuel burned (based on annual fuel consumption record.) amount of fuel consumed annually."

**Response:** "Certification stating (that) the generators have not been modified to increase fuel input rate" is not a valid means of periodic monitoring. All emissions monitoring must satisfy WAC 173-401-615 requirements. Therefore, both comments 6.a. and 6.b. are not accepted. Per discussion with Hanford staff, the following changes would be acceptable to Ecology:

“Periodic Monitoring” – Recordkeeping and average fuel consumption rate determination shall be performed at least once per 12 months.

“Required Records” – Amount of fuel consumed annually and hours of operation.

7. Page 1-31, third condition "Engine E shall burn only No. 2 fuel oil with sulfur content no more than 0.05 weight percent.":
- Edit "Periodic Monitoring" to read "Recordkeeping ~~and/or emission calculations.~~"
  - Edit "Required Records" to read:
    - Vendor documentation (e.g., material safety data sheet) or
    - fuel analysis once per year showing no more than 0.05 weight percent sulfur.

**Response:** Comment not accepted. The “and/or” language already provides operational flexibility. Ecology requires fuel analysis once per fuel shipment rather than once per year.

8. Page 1-32: Edit "Required Records" to read "~~Operations log.~~ Results of visible emissions survey or records of visual determination of the opacity."

**Response:** Comment accepted, as long as the “results of visible emissions survey or records of visual determination of the opacity” are auditable.

9. Page 1-33, first condition "10 % Opacity.": Edit "Required Records" to read "~~Operations log.~~ Results of visible emissions survey or records of visual determination of the opacity."

**Response:** Comment accepted, as long as the “results of visible emissions survey or records of visual determination of the opacity” are auditable.

10. Page 1-33, second condition " NOx 42 pounds per hour NOx.":
- Edit "Periodic Monitoring" to read "Certification stating the generators have not been modified to increase fuel input rate or ~~Recordkeeping & average fuel consumption rate determination shall be performed at least once per 12 months.~~"
  - Edit "Required Records" condition number 1 to read "If applicable, Monthly fuel burned (based on annual fuel consumption record.) amount of fuel consumed annually."

**Response:** “Certification stating (that) the generators have not been modified to increase fuel input rate” is not a valid means of periodic monitoring. Therefore, both comments 10.a. and 10.b. are not accepted. Per discussion with Hanford staff, the following changes would be acceptable to Ecology:

“Periodic Monitoring” – Recordkeeping and average fuel consumption rate determination shall be performed at least once per 12 months.

“Required Records” – Amount of fuel consumed annually and hours of operation.

11. Page 1-33, third condition "Engine W shall burn only No. 2 fuel oil with sulfur content no more than 0.05 weight percent.":

- a. Edit "Periodic Monitoring" to read "Recordkeeping ~~and/or emission calculations.~~"
- b. Edit "Required Records" to read:
  1. Vendor documentation (e.g., material safety data sheet) or
  2. fuel analysis once per year showing no more than 0.05 weight percent sulfur.

**Response:** Comment not accepted. The “and/or” language already provides operational flexibility. Ecology requires fuel analysis once per fuel shipment rather than once per year.

12. Page 1-34, first condition "Engine W shall operate no more than 350 hours per year.": Edit the "Required Records" to read "Maintain records ~~operations log~~ showing all hours of operation."

**Response:** Comment accepted.

13. Page. 1-37, In Condition 2.D.2. the last line of the condition statement has been truncated. The condition should read:  
"Opacity from the sixth stack with High Efficiency Particulate Air (HEPA) filters air emission control shall not exceed 5%."

**Response:** Comment accepted.

14. Page 1-38, In Condition 2.A., its last paragraph, last line reads ...”Laboratory EMSL (PNNL unpublished method, dated 4/12/2003) and...” . The next (last) line has been left off this sentence. It should read:

”Laboratory EMSL (PNNL unpublished method, dated 4/12/2003) and may be modified with Ecology’s concurrence.”

**Response:** Comment accepted.

15. Page 1-38, In Condition 2.B., the last line of the condition is also not shown and should read:

“EMSL personnel shall keep volatile chemicals covered at all times when practical, on weekends, and during evenings hours, or other times when the lab module is not being otherwise used.”

**Response:** Comment accepted.



16. Page 1-39, Condition 2.D.1 is truncated. It should read:  
"Opacity from the five chemical stacks shall not exceed 10% as measured by Washington State Source Test Method 9B."

**Response:** Comment accepted.

17. Page 1-40, Condition 2.D.3 is truncated. It should read:  
"Opacity from stacks for three boilers shall not exceed 5%."

**Response:** Comment accepted.

18. Page 1-42, The last part of the condition is garbled. It should read:
- Annual (calendar year) natural gas and diesel fuel consumption by boilers
  - Annual (calendar year) diesel fuel consumption by generators
  - Records demonstrating operation to good combustion practices
  - Records documenting use of diesel with a sulfur content of 0.05% or less.

This condition is required to implement the Washington State Implementation Plan, and is therefore federally enforceable.

Periodic Monitoring: Recordkeeping.  
Test Method: Not Specified.  
Frequency: Annually.

**Response:** Comment accepted.

19. Page 1-43, the last condition on the page. The last line of the condition statement is truncated. It should read:  
"The above release limits and the ASILs shall not be exceeded until a revised NOC application is submitted to Ecology and approved by Ecology."

**Response:** Comment accepted.

20. Page 1-47, the last condition on the page. The last line of the condition statement is truncated. It should read:  
"A new Notice of Construction also is required if total building emissions of criteria pollutants would exceed the WAC 173-400-110 thresholds."

**Response:** Comment accepted.

21. Page 1-51, the line for "Frequency: For each change." should line up with the left margin.

**Response:** Comment accepted.

22. Page 1-86, "SO<sub>2</sub> EMISSIONS COMPLIANCE", Tier 1: Edit the first table cell entry to read "1. Amount and type of Ffuel burned"

**Response:** Comment accepted.